

Science Knowledge Organiser

Year 3 Term 2.2 2022-23 ★ Plants

Key Vocabulary



Key Vocabulary	Definition
air	An invisible gas, made up of mainly oxygen and nitrogen with some carbon dioxide.
nutrients	Parts of foods that a living thing uses to survive and grow.
soil	Substance on the surface of the Earth in which plants grow, made up of pieces of rock and humus.
fertiliser	Substance that is added to soil to help the growth of plants.
pollination	When pollen is moved from plant to plant to produce more plants.
seed dispersal	When seeds are carried away from the parent plant.

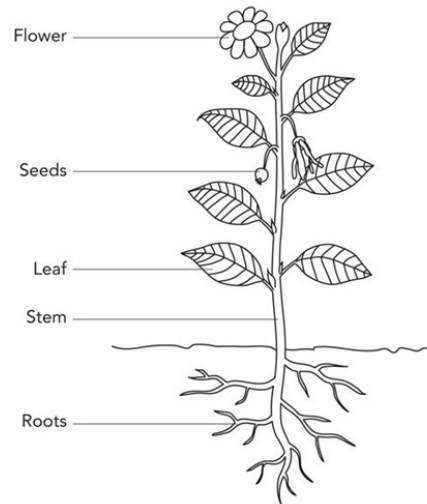
Prior Learning

In key Stage 1 you learnt:

To identify and name a variety of common and wild garden plants.

How to identify and describe the basic structure of a variety of common flowering plants, including trees.

Parts of a flowering plant



How seeds and bulbs grow into mature plants and you found out how plants need water, light and a suitable temperature to grow and stay healthy.

Significant People

Anna Atkin

(1799—1871)



Botanist and photographer from England.

A botanist is somebody who studies plants.

Often considered the first person to publish a book illustrated with photographic images—*Photographs of British Algae*.

Atkins kept the algae, ferns and other plants that she used in her work and in 1865 donated her collection to the British Museum.

Requirements for growth



The sun provides energy for plants to make their own food energy in their leaves. It also provides warmth to help growth.

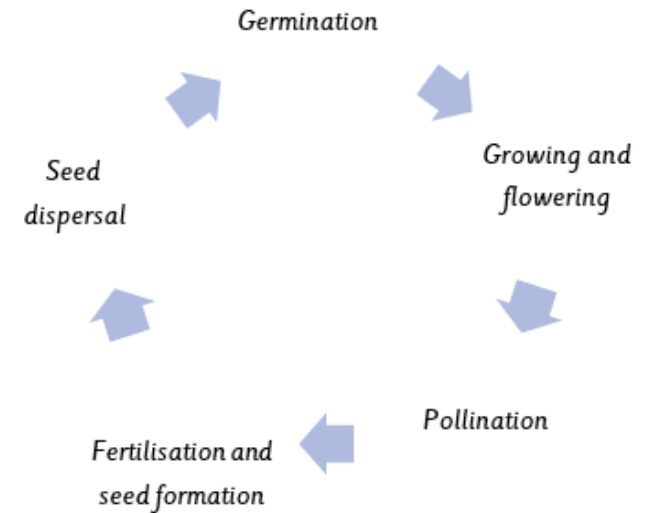


Plants take in carbon dioxide from the air to use in the process of PHOTOSYNTHESIS. This process gives off oxygen which we use to respire.



Water is used in PHOTOSYNTHESIS to help the plant make its own food. Water moves nutrients from the soil up through the roots to the stem and then the leaves through a process called TRANSPIRATION. Water helps plants stay upright.

Life cycle of a plant



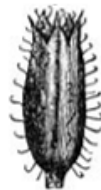
Function of the parts of a plant

Leaves



Makes food for the plant using sunlight, carbon dioxide and water. This is called photosynthesis.

Seeds



Develops into new plants.

Stem



Carries water and nutrients from the root to different parts of the plant.

Roots



Take up water and nutrients from the soil. They 'anchor' the plant in the soil.

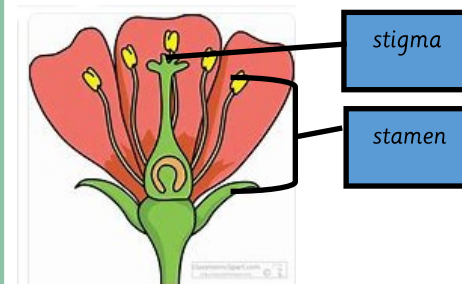
Flower



Attracts pollinators to the plant so that it can be fertilised and produce seeds.

Pollination

Pollination is the transfer of pollen from the stamens of one flower to the stigma of another flower of the same type.



Seeds are then made which can be dispersed by different ways: wind, by being eaten or carried, water.